

- It will provide high quality experiences for all users, including providing angling experiences with no boaters present on an average of 80% of days, opportunistic and hassle free boating on days of acceptable flows, camping at clean, private sites, hiking without seeing too many other groups, swimming in un-crowded pools of clean water, and visiting a wild and natural river on which man has a small influence.

IV. Other Important Management Issues and Proposed Alternatives

Based upon the USFS's lines of inquiry during the user capacity analysis process, American Whitewater briefly outlines the following additional management issues related to the Chattooga Headwaters corridor and a range of alternatives for each:

A. Fish Stocking:

- Continue existing stocking rates, species, and locations
- Stock only native species, but continue existing rates¹⁹
- Reduce stocking rates, and prioritize native species.
- Eliminate helicopter stocking²⁰
- Expand stocking to entire river

B. User Created Trails:

- Continue existing management
- Close 33% of user created trails of highest impact and/or lowest use, formalize the remaining 67%
- Close 66% of user created trails of highest impact and/or lowest use, formalize the remaining 34%
- Close all user created trails within 50 feet of the river
- Close all user created trails.

C. In-stream Wood Management:

- Continue current policy
- Promote wood recruitment

¹⁹ See our extensive comments on the impacts of stocking nonnative fish such as rainbow and brown trout in our comments on the USFS Report Titled "Capacity and Conflict on the Upper Chattooga River.

²⁰ An analysis of the recreational impacts of vehicular intrusion into the corridor via helicopter must be conducted.

- Prohibit all wood removal or addition
- Publish new guidelines on wood management that allow movement of only ecologically low-functioning and recreationally high risk wood pieces only to the degree that allows passage. Educate users on guidelines.
- On the Chattooga, several stakeholders seem to feel that paddling and wood in rivers is inconsistent. Nothing could be farther from the truth. Assessing, paddling, and portaging wood is a fundamental part of the paddling experience on *every* whitewater river. The Boating study showed that current conditions support paddling with limited interaction with in-stream wood. Changes in the amount or distribution of wood cannot be anticipated within the timeframe of the current forest plan, and therefore management must be based on current conditions and be flexible enough to address changes. Current and anticipated conditions do not require active management of wood. The most appropriate management is to educate paddlers on the ecological value that wood plays and either discourage or prohibit wood removal. We should note also that much of the Chattooga Headwaters is high-gradient and bedrock and boulder controlled, and therefore many areas are simply wood transport zones. Impacts of movement of an extremely small percentage of the wood in the system would not be found to have a significant ecological or social impact.²¹

D. Parking

- Maintain existing parking opportunities
- Increase parking capacity by 30%
- Decrease parking capacity by 30%
- Move all parking out of corridor

E. Private Land Corridor

- Continue existing management
- Legally establish USFS right to manage floating through the reach
- Negotiate a recreation easement along the river
- Condemn a recreational easement along the river
- Negotiate a scenic easement along the river

²¹ See Exhibit 3 (discussing management of wood in rivers).

- Condemn a scenic easement along the river

V. Conclusions

The proposed USFS Alternatives are deficient in many respects. American Whitewater asks that the USFS analyze both the framework and the specific alternatives it has presented in these comments. American Whitewater further asks the USFS to modify its proposed USFS Alternatives relating to whitewater boating access to conform to American Whitewater's proposed alternatives, as set forth above. Of the alternatives presented by the USFS, we prefer #6.

Exhibit 1

Direct Limits on Boating Access: Special Permitting System²²

The special permitting system outlined below would only be appropriate if, after a sufficient period of data collection on actual boating use, the data shows that the capacity of the Chattooga Headwaters cannot accommodate existing levels of boating use (as opposed to total use of all users), and that indirect measures have failed. The following temporary permitting system could be used by the USFS to directly limit whitewater boating use:

- Paddling trip leaders would have to secure a free permit from the USFS online or via phone for the day they wish to paddle a specific section of the Headwaters (Chattooga Cliffs, Ellicott Rock, and/or the Rock Gorge/Delayed Harvest Reach). Trip leaders may secure permits for multiple sections on the same day.
- The permits will become available at 8am on the day prior to the desired paddling day, and will remain available until filled.
- Permits will be nontransferable and awarded to individual trip leaders and cover that individual's group, the members of which do not have to be named on the permit.
- Group size will be limited to 8 people, and group members must travel together.
- The permit itself will simply be an 8 digit number that paddlers must write on their registration form, which will be available online and/or at the put-in.
- Identity of permit applicants will be positively identified using some means (Driver's License Number, Social Security Number, Valid Credit Card Number, Etc) upon application.
- The USFS will make every effort to detect and prosecute fraudulent permit applications by individuals not actually intending to paddle the river. To this end, individuals may incur two no-shows per year at which point permit applications will no longer be accepted for that year, filing fraudulent permit applications must be made a punishable offence, paddlers must register at access areas as well as securing a permit, the USFS must do spot counts, and the names of trip leaders must be published on the Sumter National Forest website on a monthly basis.

Potential variations to this permit system based upon number of trips include:

Variation A: Permit 12 boating trips per day. (all flows)

Variation B: Permit 8 boating trips per day. (all flows)

²² Limits should not be imposed on users until standards are reached or exceeded. Doing so causes significant and undue burdens on both the administrating agency and the public. This certainly applies to boating on the Chattooga which we expect to be among the smallest uses in the Headwaters corridor with the smallest impacts.

Variation C: Permit 4 boating trips per day. (all flows)

Variation D: Permit 2 boating trips per day below 285cfs at Burrells Ford, and 8 boating trips per day above 285cfs. In addition to the methodology above, the following permit elements would also be required for Variation D:

- A flow trigger would be set at 285 cfs, roughly the median of the shared flow range.
- The Burrell's Ford gage would have to be online as well as physically readable, and the stage representing 285 cfs would have to be clearly marked on both versions. The gage would have to update online in 15 minute increments.
- The first two permits issued for a given day would be guaranteed, and the remaining 6 would be conditional on flows.
- Conditional permit holders may run the river on the permitted day if the river is running at least 285 cfs at 8am on the permitted day, or if/when it reaches 285 cfs at some point during the day.
- Conditional permit holders that do not run the river on the permitted day will not be penalized with a no-show penalty unless the flow is at or above 285 at 8am on their permitted day.

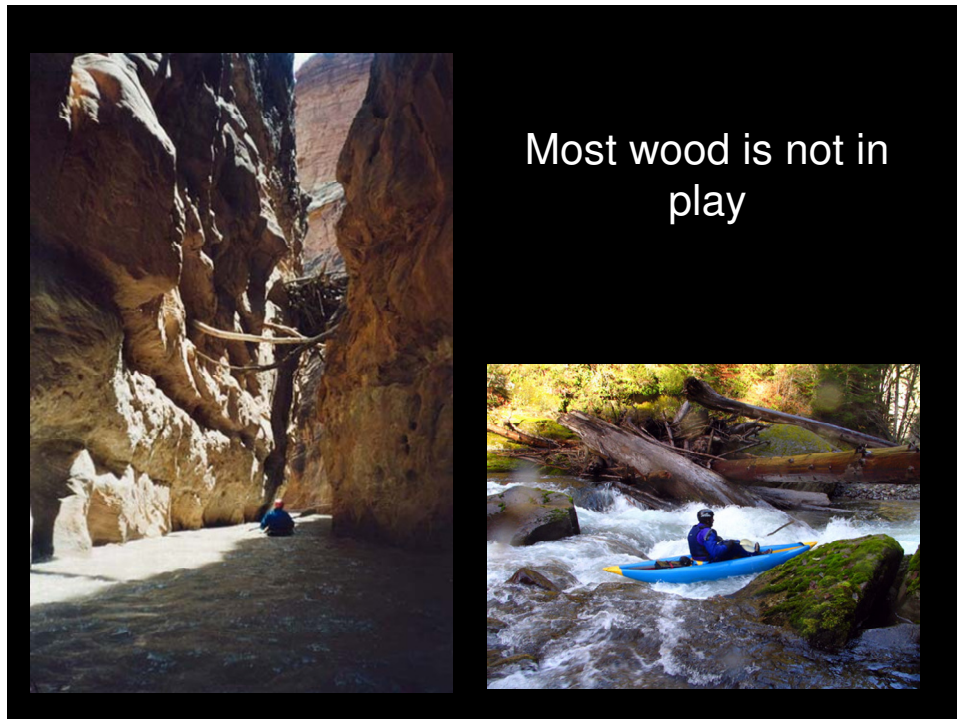
Exhibit 2

**Additional Resources to Consider
in Formulation of Final USFS Proposed Alternatives**

- American Whitewater's Comments and Suggested Revisions Regarding the Draft Upper Chattooga River Phase I Data Collection Expert Panel Field Assessment Report, dated February 2007, and first made available to the public on April 2, 2007, Respectfully Submitted on April 6, 2007
- American Whitewater's Comments on the "Chattooga River History Project Literature Review and Interview Summary", Respectfully Submitted on April 17, 2007
- American Whitewater's Comments on the USFS Report titled "Capacities on other Wild and Scenic Rivers: seven case studies", Respectfully Submitted on May 7, 2007
- American Whitewater's Comments on the Chattooga Literature Review Report, Respectfully Submitted May 7, 2007
- Comments on the USFS Report Titled "Capacity and Conflict on the Upper Chattooga River", Submitted on July 3rd, 2007
- American Whitewater's Notice of Appeal of the Record of Decision (ROD) for the Sumter National Forest Revised Land and Resource Management Plan (RLRMP) and its accompanying Final Environmental Impact Statement (FEIS).
- DECISION FOR APPEAL OF THE SUMTER NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN REVISION, #04-13-00-0026 American Whitewater, Dated April 28th, 2005.

Exhibit 3

On May 22nd, 2007, American Whitewater's National Stewardship Director, Kevin Colburn participated on a panel discussion at a River Management Society conference that focused on management of wood in rivers. The talk was well attended by river managers from across the country. The following is a synopsis of the talk.



Most wood is not in play: The vast majority of wood pieces in river and riparian systems are not recreationally problematic or especially dangerous to paddlers. Paddlers generally refer to these non-problematic pieces as being “not in play.” In general, wood is not in play when it can be paddled under, over, around, or beside without exposing paddlers to unacceptable risks.



Paddling wood is part of paddling: Portaging (or moving) wood requires a significant amount of time and energy, and is avoided by paddlers whenever possible. Therefore many paddlers, especially skilled paddlers, are highly adept at avoiding in-channel wood pieces. When approaching and assessing a piece of wood or accumulation of wood pieces, paddlers are faced with a variety of options:

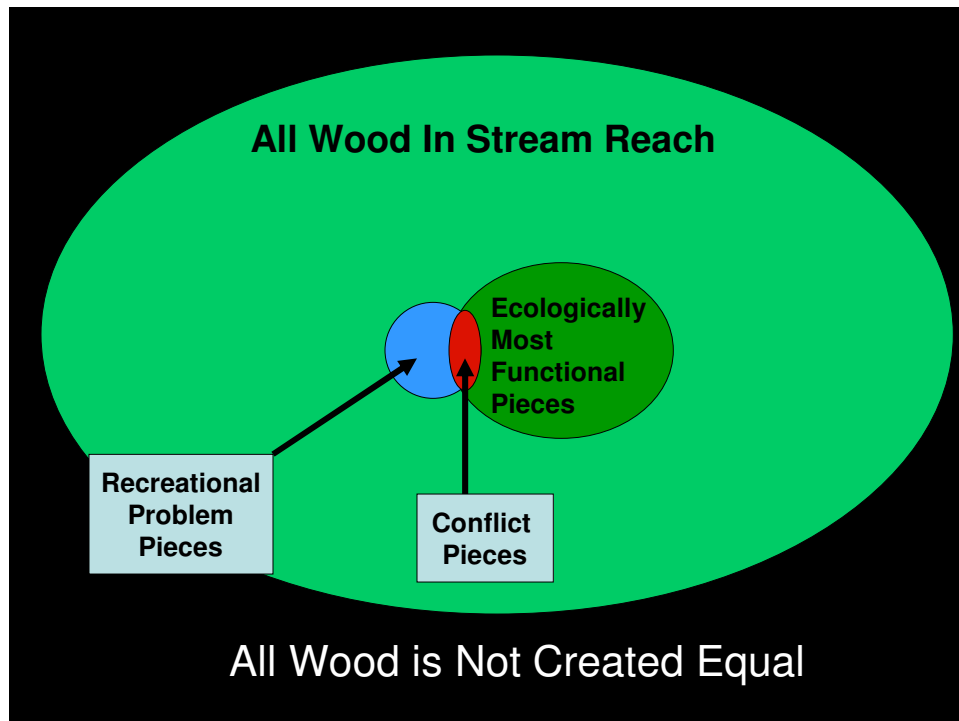
- Most often a clear route around the wood can be taken, since the majority of wood pieces and accumulations do not completely span the full channel or all channels.
- If at least part of the wood piece or accumulation is partially or fully submerged, paddlers can often paddle over the piece of wood.
- If at least part of the wood piece or accumulation is partially or fully at least two feet above the water level, paddlers can often paddle or push under the piece of wood.

Oftentimes, wood creates interesting and enjoyable challenges for paddlers. Negotiating wood in rivers is viewed as part of the paddling experience. The presence of wood often increases risk, but is viewed as part of the natural ecosystem and natural challenge. Paddling is not inconsistent or in conflict with wood in rivers, rather wood in rivers is a fundamental element of paddling.



Portaging wood is
part of paddling

Portaging wood is part of paddling: There are situations where for some period of time (ranging from minutes to decades or longer) that wood pieces or accumulations totally block recreational passage. These instances represent a very small percentage of wood pieces in a river system. In these cases, paddlers typically either portage the obstruction or avoid the reach until the obstruction naturally changes enough to allow passage. Portaging wood obstructions is an expected and integral part of the paddling experience, particularly on narrow streams. Wood portages can often be very short and accomplished within the channel.



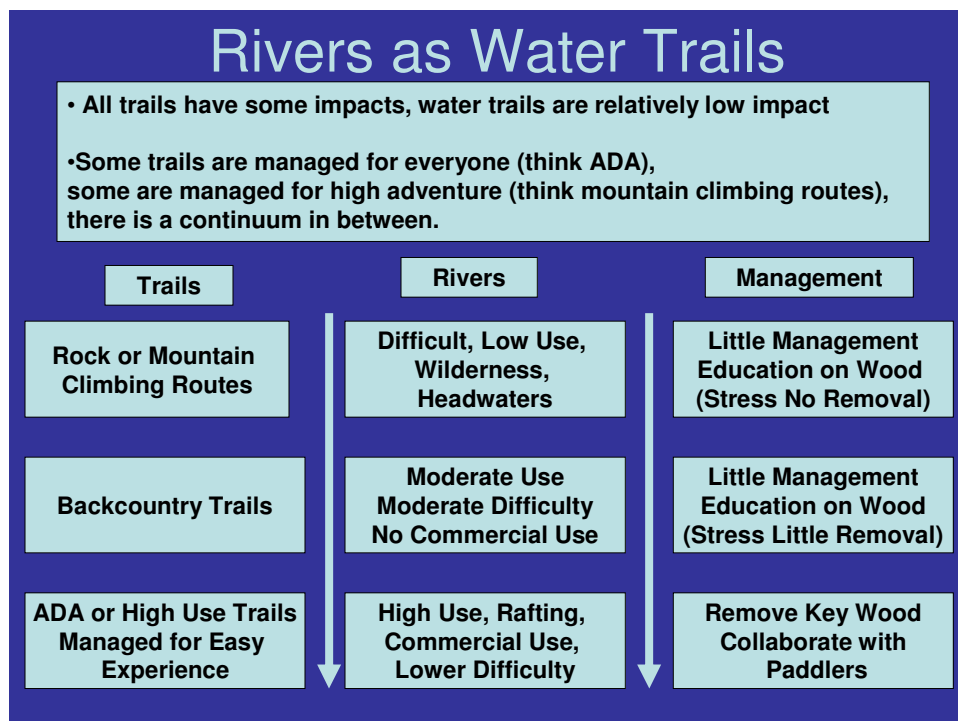
All wood is not created equal: Occasionally, based on a wide range of variables, river managers or users will move wood to allow passage, partially remove wood to allow passage, or fully remove wood to allow passage. Only wood pieces that require portage or pose a serious risk to paddlers' safety are candidates for being moved, partially removed, or fully removed for recreational reasons. In the figure above, these wood pieces are depicted in light blue. River managers and users prefer to alter wood as little as possible due to the significant amount of work that moving wood requires, and due to a shared commitment to maintaining a naturally functioning river environment. Therefore no movement is preferred over any management, movement is preferred over any type of removal, and partial removal is preferred over full removal.

A small percentage of wood pieces in rivers are disproportionately ecologically functional and important. The body of literature describing the factors that contribute to a wood piece or accumulation's ecological value is robust and proven. Wood pieces can provide a variety of stream functions depending on their size, shape, and location in the channel. These functions include sediment trapping, habitat complexity formation, and flow modification. Wood is not a significant food source to aquatic ecosystems as some stakeholders have claimed. In general, wood is most important and functional when the wood piece is large and long, when the log is actively trapping sediment, when the log is adjacent to floodplains, and when the bed and adjacent banks are of a fine substrate. In the figure above, these wood pieces are depicted in dark green.

There may be some pieces that are both ecologically vital and recreationally problematic - but this is a very small percentage of wood pieces - and should be the subject of careful management. In the figure above, these wood pieces are depicted in red.

The light green wood pieces in the figure above are not a concern to recreational river managers because there is no cause for movement or removal by river managers or users. The dark green wood pieces in the figure above are likewise at no risk of removal, but may deserve special attention or management because of their ecological value. The light blue wood pieces in the figure above may be best managed through public education, collaboration, and through typical agency action decision pathways. These pieces may be candidates for movement or removal in some situations as described later in this report. The dark red wood pieces in the figure above may be best managed by agency personnel following defined wood management protocols. These pieces should not be removed except in cases where agencies have formally deemed it the preferred alternative for ecological and/or recreational reasons.

All wood within the effect of a river exists in a dynamic state of decay, wear, and movement. Wood pieces may play a variety of ecological roles throughout their transition from a freshly fallen tree to assimilated molecules. The premise behind the above concept is that the subtle effect of moving as few of the light blue pieces as little as possible, while the light green, dark green, and red pieces remain unmoved, will allow this natural process to proceed at all relevant scales without any significant ecological effects.



Rivers as water trails: River managers may find it useful to think of rivers as extremely low impact trails. Trails are corridors through which people experience nature. It is widely accepted that some form of land trails – while they have some environmental footprint - are suitable in all settings from roadside picnic areas to remote Wilderness areas. With that said, ADA or high use trails are managed very differently from Wilderness trails. Likewise rivers are managed on a continuum of standards aimed at providing different types of experiences that are appropriate for the setting.

This may be a useful analogy in determining wood management practices. Rivers that are difficult, low use, Wilderness, and/or small in size may be analogous to rock or mountain climbing routes. River managers may wish to manage wood in these rivers primarily through educating user groups, and stressing no removal. Moderate use, moderate difficulty, rivers with no commercial use may be analogous to standard backcountry trails. River managers may wish to manage wood in these rivers primarily through educating user groups, and stressing little removal. River managers may also wish to apply some direct management of wood to these reaches. High use, commercially used, rafted, and/or easier rivers may be analogous to ADA or high use managed trails. River managers may wish to work collaboratively with the paddling community to remove wood pieces that are recreationally problematic and not highly ecologically functional. This concept was proposed primarily for discussion purposes. Discussion following the talk pointed out that this is a very oversimplified framework, and that these types of decisions must be made on a case by case basis.



Anglers can learn which fish to eat and which to release.

Paddlers can likewise learn which situations it is more OK or not OK to remove or move wood, and how to best do it.

The role of education: There is often hesitance on the part of river and land managers to encourage the public to participate in active management projects. This has been the case with management of wood, on which there has been little work to educate or include the public in management activities ranging from protection of all wood pieces to limited removal efforts. It is a management hot potato.

With this being said, there is ample precedent for agencies educating the public on how to participate in active management activities in cases where there is little oversight and some basic ecological knowledge required. One example is in the left hand picture above. This man is holding up a federally threatened bull trout, which he will presumably release. Agencies trust anglers to be able to differentiate between game fish and which they can kill and eat, and extremely similar endangered fish which must be handled appropriately and released. Hunters

likewise must be able to tell the difference between game and non-game (coyote and wolf for example) at long distances with lives of endangered species on the line. Even community weed-pulls are examples of agencies educating the public on the value of some organisms while working with them to manage others.

Paddlers are certainly capable of likewise learning which situations it is more OK or not OK to move or remove a piece of wood, and how to do it with the smallest ecological footprint. Educational efforts could be targeted at any chosen wood management practice, including policies enforcing no movement, collaborative movement, or movement of certain types of pieces.

Do Not Move/Remove Log	↔	More OK to Re/move Log
Ecological Considerations		
Sand, Gravel, Cobble Banks	↔	Bedrock Banks
Floodplain Adjacent to Channel	↔	Cliffs Adjacent to Channel
Log Trapping Sediment	↔	Log Above Water Level
Log is Large and Long	↔	Log is Small and Short
Stream has Endangered Species	↔	No Endangered Species
No Riparian Vegetation	↔	Dense Riparian Vegetation
Heavily Impacted Watershed	↔	Intact Forested Watershed
Paddling Considerations		
Log is Obvious	↔	Log is Hidden
Log is Avoidable While Paddling	↔	Log is Unavoidable
Log is Easily Portaged	↔	Log is Impossible to Portage
Log Unlikely to Entrap Paddler	↔	Log Likely to Entrap Paddler
Log in Seldom Paddled Reach	↔	Log in Popular Reach
Class V	↔	Class II/III
Wilderness	↔	Urban

An educational model: Paddlers currently have such a policy that they operate under that was developed in 2001 by Kevin Colburn, and published by American Whitewater on their website and in their journal. The policy educates paddlers on the ecological role that wood plays in river ecosystems, strongly discourages any wood movement, while offering an educational decision model for paddlers considering the movement of a piece of wood. This model offers continuums of both ecological and recreational considerations.